

Title (en)
Optical transmitter

Title (de)
Optischer Sender

Title (fr)
Emetteur optique

Publication
EP 0504834 B1 19970611 (EN)

Application
EP 92104674 A 19920318

Priority
JP 8183891 A 19910320

Abstract (en)

[origin: EP0504834A2] An optical transmitter includes a semiconductor laser which is supplied with a frequency modulated current. An emitted light from the semiconductor laser is modulated in intensity by an intensity modulator in accordance with an information signal and becomes a signal light pulse. The spectral width $\Delta\nu_m$ of the light and a power P_s of the signal light pulse meet the following formulas: $P_s > P_{th}$ and $\Delta\nu_m < \Delta\nu_B$ where P_{th} is a threshold input light power when the stimulated Brillouin scattering begins to occur in the optical fiber in case of no frequency modulation of said light, $\Delta\nu_B$ is the Brillouin gain bandwidth of the optical fiber, and $\Delta\nu_s$ is the spectral width of the signal light in case of no frequency modulation of the light. <IMAGE>

IPC 1-7
H04B 10/18

IPC 8 full level
G02F 1/35 (2006.01); **H04B 10/071** (2013.01); **H04B 10/2537** (2013.01); **H04B 10/516** (2013.01); **H04B 10/524** (2013.01); **H04B 10/54** (2013.01);
H04B 10/588 (2013.01); **H04B 10/61** (2013.01)

CPC (source: EP US)
H04B 10/2537 (2013.01 - EP US)

Cited by
US8384978B2; FR2851100A1; GB2359684A; EP0584647A1; US6621619B2; AU670320B2; US2011002029A1; EP0653854A1; EP0595536A1;
GB2316562A; US5900959A; EP0561692A1; FR2688965A1; US5442473A; US2010002281A1; CN103308083A; EP0720313A1; EP0598651A1;
FR2698225A1; AU662252B2; US7983571B2; WO2004079952A1; WO2009112811A1; WO2008032021A3

Designated contracting state (EPC)
DE FR GB

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JP 3036876 B2 20000424; JP H04293024 A 19921016; US 5315426 A 19940524

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